

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A composition comprising a non-covalent association complex of:
 - a) a positively-charged backbone; and
 - b) at least two members selected from the group consisting of:
 - i) a ~~first~~ negatively-charged backbone having a plurality of attached imaging moieties;
 - ii) a ~~second~~ negatively-charged backbone having a plurality of attached targeting agents;
 - iii) at least one member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene;
 - iv) DNA encoding at least one persistence factor; and
 - v) a ~~third~~ negatively-charged backbone having a plurality of attached biological agents;wherein said association complex carries a net positive charge and at least one of said two members from group b) is selected from groups i), iii) or v).
2. (withdrawn) A composition in accordance with claim 1, wherein said biological agent is a therapeutic agent.

3. (withdrawn) A composition in accordance with claim 2, wherein said therapeutic agent is selected from the group consisting of VEGF, botulinum toxin, a blocker of VEGF, and insulin.
4. (withdrawn) A composition in accordance with claim 1, wherein said biological agent is a cosmeceutical agent.
5. (withdrawn) A composition in accordance with claim 4, wherein said cosmeceutical agent is Epidermal growth factor.
6. (withdrawn) A composition in accordance with claim 1, comprising at least three members selected from groups i) through v).
7. (withdrawn) A composition in accordance with claim 1, comprising at least one member from each of groups i), ii), iii) and iv).
8. (withdrawn) A composition in accordance with claim 1, comprising at least one member from each of groups i) and ii).
9. (withdrawn) A composition in accordance with claim 1, comprising at least one member from each of groups ii), iii) and iv).

10. (original) A composition in accordance with claim 1, wherein said positively-charged backbone has a length of from about 1 to 4 times the combined lengths of said members from group b).
11. (original) A composition in accordance with claim 1, wherein said positively-charged backbone comprises a polymer having attached positively charged branching groups.
12. (currently amended) A composition in accordance with claim 11, wherein said polymer is a peptide and said positively charged branching groups comprises one of the members are selected from the of the group consisting of -(gly)_n-arg-arg-arg-arg-arg-arg-arg (SEQ ID NO:9), HIV-TAT, and fragments thereof, wherein the subscript n is an integer of from 0 to 20.
13. (withdrawn) A composition in accordance with claim 12, wherein n is an integer of from 0 to 8.
14. (withdrawn) A composition in accordance with claim 12, wherein n is an integer of from 2 to 5.
15. (currently amended) A composition according to claim 12, wherein said HIV-TAT fragment positively charged branching groups have has the formula (gly)_p-RGRDDRRQRRR-(gly)_q, (SEQ ID NO:19) or (gly)_p-YGRKKRRQRRR-(gly)_q (SEQ ID NO:20) wherein the subscripts p and q are each independently integers of from 0 to 20,

and said HIV-TAT fragment positively charged branching group are is attached to said positively charged backbone via either the C-terminus or the N-terminus.

16. (original) A composition in accordance with claim 15, wherein the subscripts p and q are each independently integers of from 0 to 8.
17. (original) A composition in accordance with claim 15, wherein the subscripts p and q are each independently integers of from 2 to 5.
18. (withdrawn) A composition in accordance with claim 11, wherein said polymer is a polylysine and said positively charged branching groups are attached to the lysine sidechain amino groups and are selected from the group consisting of -gly-gly-gly-arg-arg-arg-arg-arg-arg (SEQ ID NO: 1) and HIV-TAT.
19. (original) A composition comprising a non-covalent association complex of a positively-charged backbone having at least one attached efficiency group and at least one nucleic acid member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene.
20. (original) A composition in accordance with claim 19, wherein said positively charged backbone is polylysine.

21. (previously presented) A composition in accordance with claim 19, wherein said efficiency group is selected from the group consisting of $(\text{Gly})_{n1}-(\text{Arg})_{n2}$ (SEQ ID NOs: 2-7), wherein the subscript n1 is an integer of from 3 to about 5, and the subscript n2 is an odd integer of from about 7 to about 17, and TAT domains.
22. (withdrawn) A composition in accordance with claim 19, wherein said positively charged backbone having at least one attached efficiency group is a 150,000 to 300,000 polylysine backbone having a plurality of attached Gly_3Arg_7 (SEQ ID NO:1) groups wherein the degree of lysine saturation is from about 5% to about 30%.
23. (original) A composition in accordance with claim 19, wherein said nucleic acid member is cDNA encoding a selected transgene.
24. (original) A composition in accordance with claim 19, wherein said nucleic acid member is part of a plasmid that expresses a detectable product.
25. (original) A composition in accordance with claim 24, wherein said detectable product is a fluorescent protein.
26. (original) A composition in accordance with claim 24, wherein said detectable product is a blue fluorescent protein.

27. (original) A composition in accordance with claim 24, wherein said plasmid further comprises a CMV promoter.

28. (withdrawn) A method for delivery of a biological agent to a cell surface in a subject, said method comprising administering to said subject a composition comprising:

- (a) a positively charged backbone;
- (b) at least one biological agent selected from the group consisting of:
 - (i) a first negatively charged backbone having a plurality of attached imaging moieties;
 - (ii) at least one member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene; and
 - (iii) a third negatively charged backbone having a plurality of attached therapeutic agents; and
- (c) a second negatively charged backbone having a plurality of attached targeting agents; wherein said composition is a non-covalent association complex of said positively charged backbone, said biological agent and said second negatively charged backbone having a plurality of attached targeting agents, and carries a net positive charge.

29. (withdrawn) A method in accordance with claim 28, wherein said biological agent is an oligonucleotide or a cDNA encoding a selected transgene, and said composition further comprises DNA encoding at least one persistence factor.

30. (withdrawn) A method in accordance with claim 28, wherein said biological agent is a first negatively charged backbone having a plurality of attached imaging moieties.
31. (withdrawn) A method in accordance with claim 28, wherein said biological agent is a third negatively charged backbone having a plurality of attached therapeutic agents.
32. (withdrawn) A method in accordance with claim 28, wherein said administering is intravenous.
33. (withdrawn) A method in accordance with claim 28, wherein said administering is transdermal.
34. (withdrawn) A method in accordance with claim 28, wherein said administering is carried out using an angioplastastic balloon.
35. (withdrawn) A method in accordance with claim 28, wherein said administering is carried out using a catheter.
36. (withdrawn) A method in accordance with claim 28, wherein said administering is intraperitoneal.
37. (withdrawn) A method in accordance with claim 28, wherein said composition is in a gel formulation.

38. (withdrawn) A method for preparing a pharmaceutical composition, said method comprising combining

a positively charged backbone component and

at least two members selected from the group consisting of

- i) a first negatively-charged backbone having a plurality of attached imaging moieties;
- ii) a second negatively-charged backbone having a plurality of attached targeting agents;
- iii) at least member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene;
- iv) DNA encoding at least one persistence factor; and
- v) a third negatively-charged backbone having a plurality of attached therapeutic agents; with a pharmaceutically acceptable carrier to form a non-covalent association complex having a net positive charge, with the proviso that at least one of said two members from groups i) through v) is selected from groups i), iii) or v).

39. (currently amended) A kit for formulating a pharmaceutical delivery composition, said kit

comprising

a positively charged backbone component and

at least two members selected from the group consisting of

- i) a ~~first~~ negatively-charged backbone having a plurality of attached imaging moieties;
- ii) a ~~second~~ negatively-charged backbone having a plurality of attached targeting agents;
- iii) at least one member selected from the group consisting of RNA, DNA, ribozymes, modified oligonucleotides and cDNA encoding a selected transgene;
- iv) DNA encoding at least one persistence factor; and
- v) a ~~third~~ negatively-charged backbone having a plurality of attached therapeutic agents; and

instructions for preparing said pharmaceutical delivery composition.